

## INTERNATIONAL SEARCH REPORT

International Application No

PCT/US2004/032801

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 H01J9/24 H01J17/16

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 H01J G02F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal, PAJ, WPI Data

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	PATENT ABSTRACTS OF JAPAN vol. 1999, no. 04, 30 April 1999 (1999-04-30) & JP 11 007894 A (TOPPAN PRINTING CO LTD), 12 January 1999 (1999-01-12)	1-4, 15-17
Y	abstract	5-13, 18
X	US 5 772 486 A (SEKI ET AL) 30 June 1998 (1998-06-30) column 6, line 5 - line 21; figure 1 column 6, line 67 - column 7, line 15	1-3
A	EP 1 306 872 A (TORAY INDUSTRIES, INC) 2 May 2003 (2003-05-02)	1
Y	abstract; figures 2,4 paragraph '0009! - paragraph '0011! paragraph '0014! - paragraph '0022! paragraph '0068! - paragraph '0073!	18
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☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

## \* Special categories of cited documents:

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Date of the actual completion of the International search

9 February 2005

Date of mailing of the International search report

21/02/2005

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	WO 01/52299 A (3M INNOVATIVE PROPERTIES COMPANY; KIKUCHI, HIROSHI; YOKOYAMA, CHIKAFUM) 19 July 2001 (2001-07-19) cited in the application the whole document -----	9-13
Y	US 5 972 564 A (KAWANA ET AL) 26 October 1999 (1999-10-26) column 3, line 20 - line 28 column 6, line 66 - column 7, line 10; claim 12 -----	5-8

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US2004/032801

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
JP 11007894	A	12-01-1999	NONE	
US 5772486	A	30-06-1998	JP 8036163 A	06-02-1996
			JP 3430666 B2	28-07-2003
			JP 8083051 A	26-03-1996
			CA 2154219 A1	22-01-1996
			CN 1130783 A ,C	11-09-1996
			EP 0693702 A1	24-01-1996
			SG 64844 A1	25-05-1999
			US 5684361 A	04-11-1997
EP 1306872	A	02-05-2003	JP 2003132783 A	09-05-2003
			CN 1414593 A	30-04-2003
			EP 1306872 A2	02-05-2003
			TW 548683 B	21-08-2003
			US 2003129546 A1	10-07-2003
			JP 2003331650 A	21-11-2003
WO 0152299	A	19-07-2001	JP 2001191345 A	17-07-2001
			AT 263428 T	15-04-2004
			AU 3441501 A	24-07-2001
			DE 60102566 D1	06-05-2004
			EP 1254476 A1	06-11-2002
			WO 0152299 A2	19-07-2001
			US 2003022585 A1	30-01-2003
			US 2004166760 A1	26-08-2004
US 5972564	A	26-10-1999	JP 3510761 B2	29-03-2004
			JP 10269848 A	09-10-1998

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